

PATENT
854020-2001.1
09/748,063

AMENDMENT TO THE CLAIMS

Kindly amend the claims, without prejudice, without admission, without surrender of subject matter and without any intention of creating any estoppel as to equivalents, as follows;

1. (cancelled)
2. (previously presented) The method according to claim 8, wherein the sensitising comprises the step of applying an electric pulse to the red blood cell.
3. (cancelled)
4. (cancelled)
5. (previously presented) The method according to claim 8, in which the sensitisation of the red blood cell precedes the loading of the agent.
6. (previously presented) The method according to claim 8, in which the loading of the agent precedes the sensitisation of the red blood cell.
7. (previously presented) The method according to claim 8, in which the sensitisation of the red blood cell and the loading of the agent are simultaneous.
8. (previously presented) A method for selectively releasing an agent from a red blood cell comprising the steps of:
 - (a) loading the red blood cell with the agent *in vitro* or *ex-vivo*;
 - (b) sensitising *in vitro* or *ex-vivo* the red blood cell by exposing it to an electric field; and
 - (c) causing the agent to be released from the loaded and sensitised red blood cell by applying ultrasound at a frequency and energy sufficient to cause disruption of the loaded and sensitized red blood cell but insufficient to cause disruption of unsensitised red blood cells.
9. (cancelled)
10. (cancelled)
11. (previously presented) The method according to claim 8, in which the electric field is applied as an electric pulse from about 0.1 kVolts/cm to about 10 kVolts/cm under *in vitro* conditions.
12. (previously presented) The method according to claim 11, in which the electric pulse is applied for between 1 μ s and 100 milliseconds.

PATENT
854020-2001.1
09/748,063

13. (previously presented) The method according to claim 8, in which the ultrasound is selected from the group consisting of diagnostic ultrasound, therapeutic ultrasound and a combination of diagnostic and therapeutic ultrasound.

14. (previously presented) The method according to claim 13, in which the ultrasound is applied by an ultrasound energy source at a power level of from about 0.05 W/cm² to about 100 W/cm².

15. (currently amended) A method for delivering an agent to a target site in a vertebrate, comprising the steps of:

- (a) loading ~~the~~ a red blood cell with the agent *in vitro* or *ex-vivo*;
- (b) sensitising *in vitro* or *ex-vivo* the red blood cell by exposing it to an electric field;
- (c) introducing the loaded and sensitized red blood cell to the target site in a vertebrate by transfusion or infusion; and
- (d) causing the agent to be released from the loaded and sensitised red blood cell by applying ultrasound at a frequency and energy sufficient to cause disruption of the loaded and sensitised red blood cell but insufficient to cause disruption of unsensitised red blood cells.

16. (original) The method according to claim 15, in which the red blood cell of step (c) comprises polyethylene glycol on its surface.

17. (original) The method according to claim 15, in which the vertebrate is a mammal.

18. (original) The method according to claim 8 or 15, in which the loading of the agent is simultaneous with the sensitisation of the red blood cell.

19. (previously presented) The method according to claim 8 or 15, in which the sensitisation of the red blood cell precedes the loading of the agent.

20. (previously presented) The method according to claim 8 or 15, in which the loading of the agent precedes the sensitisation of the red blood cell.

21. (previously presented) The method according to claim 8 or 15, in which the loading is performed by a procedure selected from a group consisting of electroporation, sonoporation, microinjection, membrane intercalation, microparticle bombardment, lipid-

PATENT
854020-2001.1
09/748,063

mediated transfection, osmosis, osmotic pulsing, diffusion, endocytosis, and crosslinking to a red blood cell surface component.

22. (previously presented) The method according to claim 8 or 15, in which the agent is a polypeptide, a nucleic acid, or a virus.

23. (original) The method according to claim 22, in which the agent is combined with an imaging agent.